

**US NAVY
ACTIVE DUTY
EYE INJURY SUMMARY
CALENDAR YEAR 2005**

Approved for public release, distribution unlimited

2013



CY 2005 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY

INTRODUCTION: In 2010 the Armed Forces Health Surveillance Center (AFHSC) and Tri-Service Vision Conservation and Readiness Program (TSVCRP) of the US Army Public Health Command (USAPHC) began development of an Annual Active Duty Military Eye Injury Summary that would detail cause and type of injury along with demographics of eye injuries (Age, Gender, Rank, Occupational Group).

The first edition of the summary and annual summaries back through calendar year 2000, were produced in the spring of 2011. An analysis of years 2000-2010 was published in the May 2011 Medical Surveillance Monthly Report (MSMR). The AFHSC also developed a Case Definition for Eye Injuries that details the code set and methodology used to develop the summaries. Both the MSMR Article and Case Definition for Eye Injuries are available on the AFHSC website: <http://afhsc.army.mil/home>.

This summary contains detailed data, along with a set of summary tables detailing Ambulatory and Hospitalization rates (per 1000 person-years) for Injury Group, Cause of Injury and Occupational Group. Summary tables for Deployment-Associated Eye Injuries detailing frequency of Eye Injuries by Type of Injury and Occupational Group are also provided. Occupational Group data is for Enlisted members only. Deployment-Associated Eye Injuries are presented without regard to Ambulatory or Hospitalized status.

As one of the underlying goals of the summary is to make eye injury surveillance data accessible and useable, individual annual eye injury summaries for all years and all services (Combined DoD, Army, Navy, Air Force, Marine Corps and Coast Guard) are posted on the USAPHC public website.

For questions or additional information regarding the summaries please contact the TSVCRP:

By Email: usarmy.apg.medcom-phc.mbx.dcpm-tri-service-optometry@mail.mil

Telephone: 410-436-2714 FAX: 410-436-1325

Additional program information and educational materials can be found at: <http://dodvision.com/> and the USAPHC Public Website at: <http://phc.amedd.army.mil/Pages/default.aspx>

CONTENTS:

- 1) [Summary of Code Groupings](#)
- 2) [All diagrams by Injury Group](#)
- 3) [All diagrams by Cause of Injury](#)
- 4) [All diagrams by Occupational Group](#)
- 5) [Deployment-Associated Eye Injury diagrams \(by Injury and Occupational Group\)](#)
- 6) [2005 Navy Eye Injury complete statistics](#)



CY 2005 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY

INJURY CODE GROUP DETAILS: The following code groupings were used to develop the summary. Additional details may be found in the AFHSC Case Definition available at: <http://afhsc.army.mil/home>.

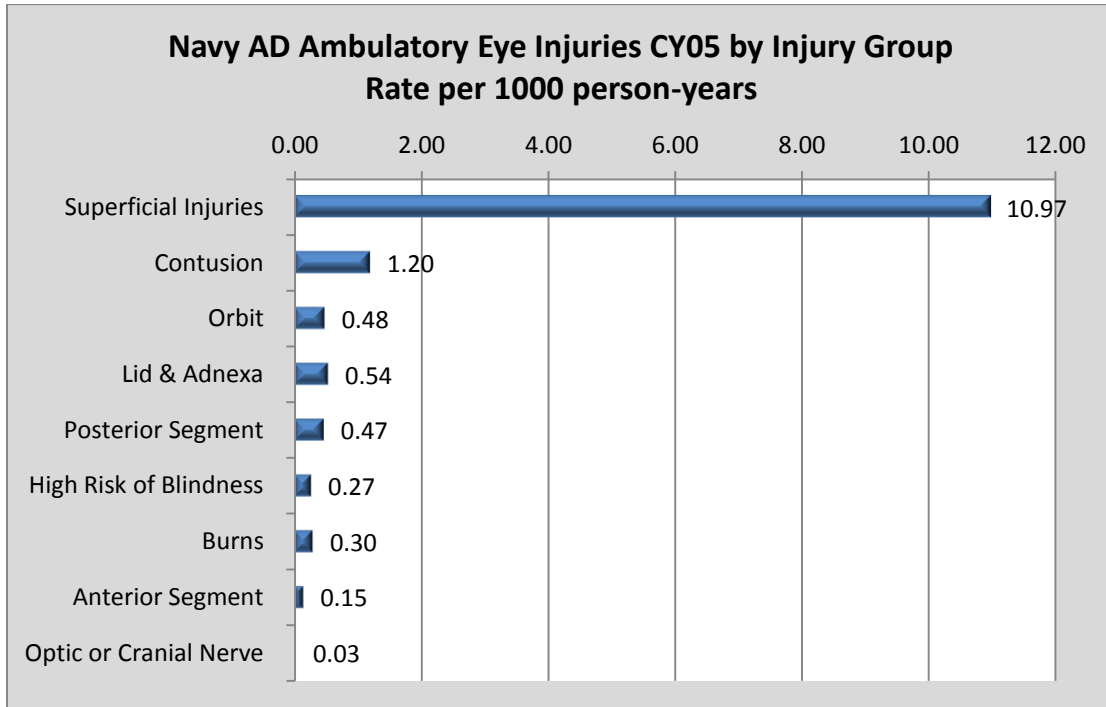
- 1) **Superficial:** all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) **Contusion:** all 921 series codes (contusion of eye and adnexa).
- 3) **Orbit:** All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating wound of orbit without and with foreign body) and 376.32 (orbital hemorrhage).
- 4) **Lid/adnexa:** all 870 series codes (open wound of ocular adnexa) with the exception of 870.3 and 870.4 (see orbit above).
- 5) **Posterior segment:** 362.81 (retinal hemorrhage), all 361.0x series codes (retinal detachment with retinal defect), 363.61 (choroidal hemorrhage, unspecified), 363.63 (choroidal rupture), 379.23 (vitreous hemorrhage), 360.00 and 360.01 (purulent and acute endophthalmitis).
- 6) **High risk of blindness:** all 871 series codes (open wound of eyeball).
- 7) **Burns:** all 940 series codes (burn confined to eye and adnexa) as well as all 940.x2 codes (burns to eye with other parts of face, head and neck).
- 8) **Anterior segment:** 364.41 (hyphema), 366.21 and 366.22 (localized and total traumatic cataract), and 364.76 (iridodialysis).
- 9) **Optic/cranial nerve:** 950.0 (optic nerve injury), 950.1 (injury to optic chiasm), 950.9 (injury to optic nerve and pathways, unspecified), 951.0 (injury to oculomotor nerve), 951.1 (injury to trochlear nerve) and 951.3 (injury to abducens nerve).

DETAILS FOR TOTAL NUMBERS: Because patients may have been coded with more than one injury group or cause of injury, the sum of cases by injury group and the sum of cases by causes of injury will be greater than the total number of patients.

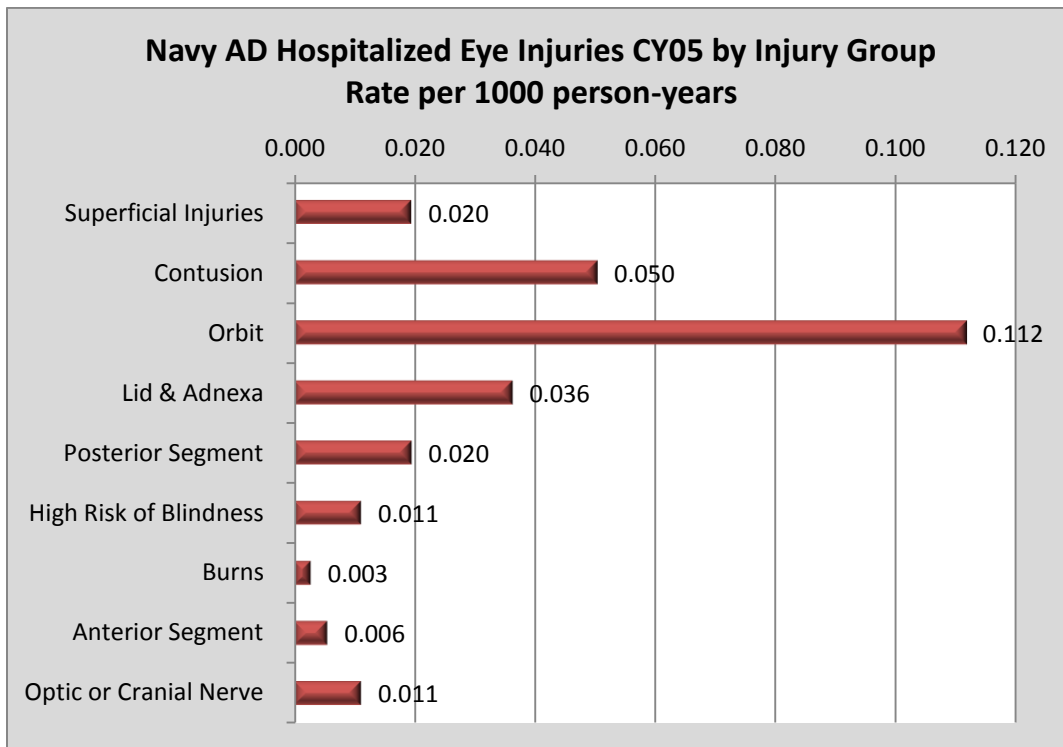
[Return to Introduction Page](#)



CY 2005 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY



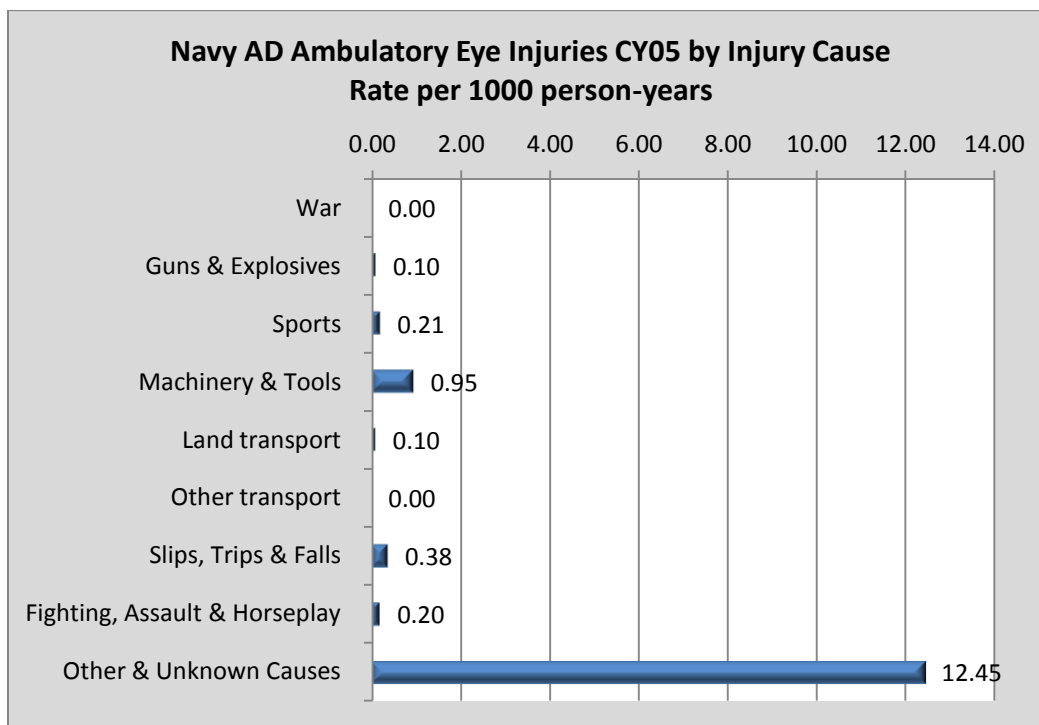
Please note the difference in scale between Ambulatory and Hospitalized graphs



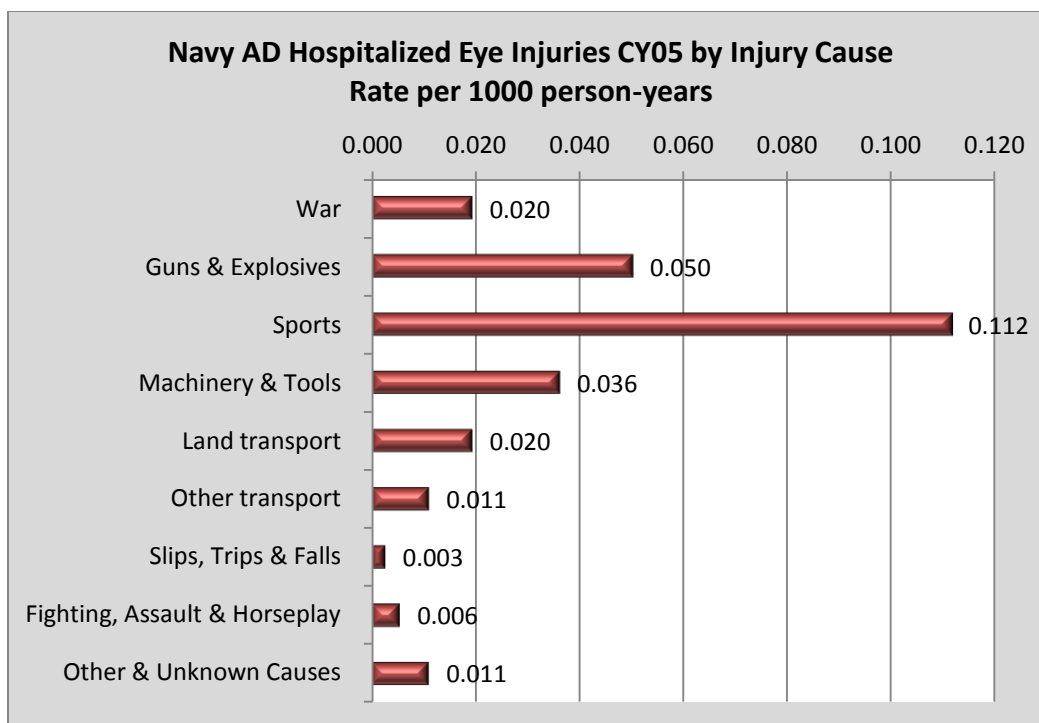
[Return to Introduction Page](#)



CY 2005 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY



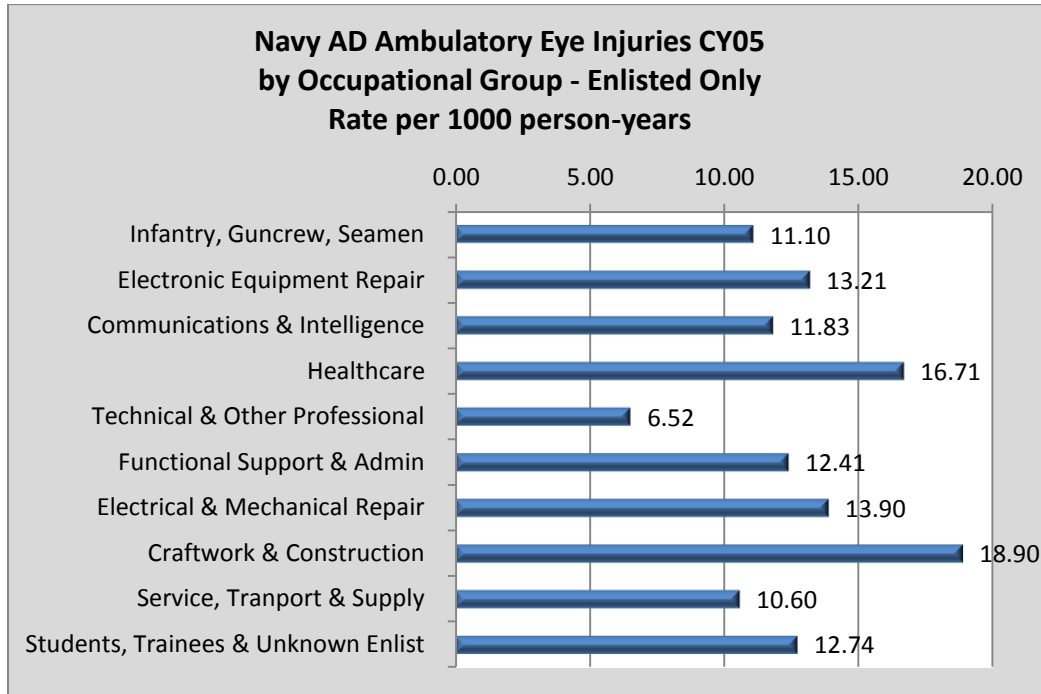
Please note the difference in scale between Ambulatory and Hospitalized graphs



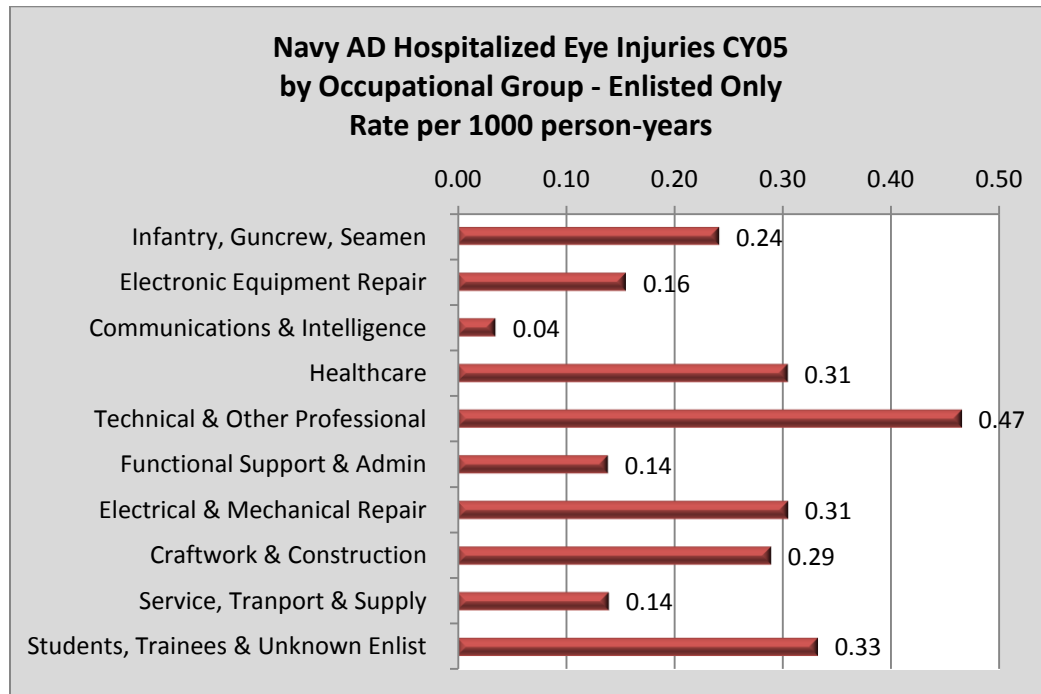
[Return to Introduction Page](#)



CY 2005 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY



Please note the difference in scale between Ambulatory and Hospitalized graphs

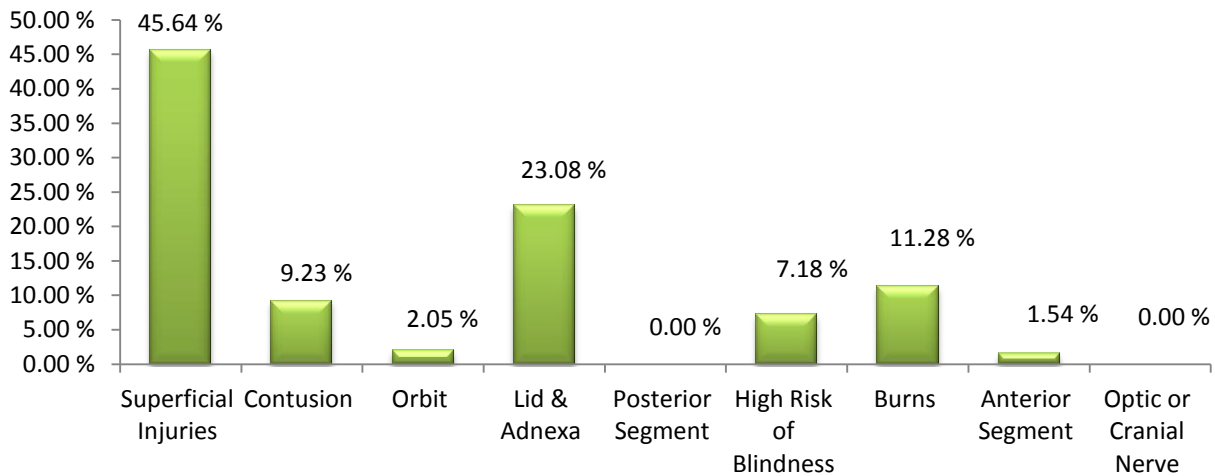


[Return to Introduction Page](#)

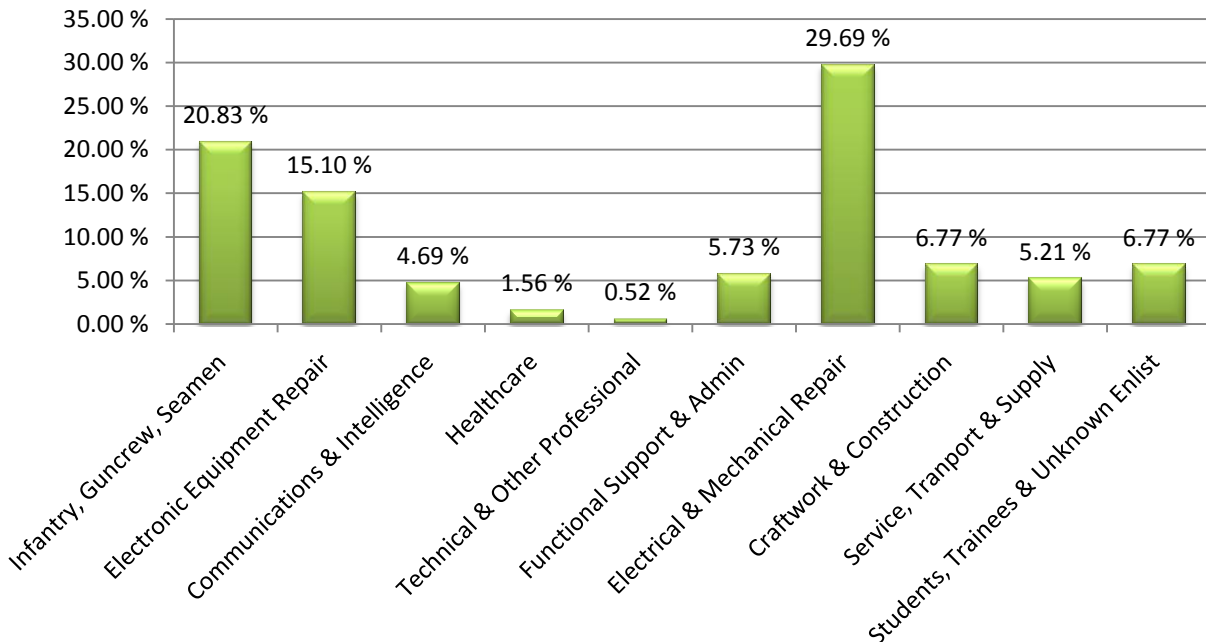


CY 2005 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY

Navy AD Deployment Associated Eye Injuries CY05 by Injury Group Percent of Total



Navy AD Deployment Associated Eye Injuries CY05 by Occupational Group- Enlisted Only Percent of Total



[Return to Introduction Page](#)



CY 2005 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY

	2005											
	Ambulatory MTF Visits				Deployment-Associated Healthcare				Hospitalizations			
	Primary		All Diagnoses		Primary		All Diagnoses		Primary		All Diagnoses	
	Count	Rate¹	Count	Rate	Count	% total¹	Count	% total¹	Count	Rate	Count	Rate
ALL ACTIVE COMPONENT												
Total	4,440	12.39	4,906	13.69	190	100.00	192	100.00	18	0.05	73	0.20
Superficial Injuries	3,664	10.22	3,933	10.97	88	45.60	89	45.64	1	0.00	7	0.02
Contusion	350	0.98	428	1.20	17	8.81	18	9.23	6	0.02	18	0.05
Orbit	131	0.37	172	0.48	4	2.07	4	2.05	13	0.04	40	0.11
Lid & Adnexa	167	0.47	192	0.54	45	23.32	45	23.08	3	0.01	13	0.04
Posterior Segment	113	0.32	168	0.47	0	0.00	0	0.00	5	0.01	7	0.02
High Risk of Blindness	89	0.25	96	0.27	14	7.25	14	7.18	4	0.01	4	0.01
Burns	99	0.28	106	0.30	22	11.40	22	11.28	0	0.00	1	0.00
Anterior Segment	38	0.11	52	0.15	3	1.55	3	1.54	2	0.01	2	0.01
Optic or Cranial Nerve	6	0.02	11	0.03	0	0.00	0	0.00	3	0.01	4	0.01
Male	3,813	12.42	4,216	13.73	171	90.00	173	90.10	17	0.06	67	0.22
Female	627	12.20	690	13.42	19	10.00	19	9.90	1	0.02	6	0.12
War	0	0.00	0	0.00	not assessed²				0	0.00	1	0.00
Guns & Explosives	32	0.09	37	0.10					0	0.00	2	0.01
Sports	70	0.20	74	0.21					8	0.02	8	0.02
Machinery & Tools	328	0.92	341	0.95					5	0.01	5	0.01
Land transport	23	0.06	36	0.10					0	0.00	7	0.02
Other transport	1	0.00	1	0.00					0	0.00	1	0.00
Slips, Trips & Falls	120	0.33	135	0.38					1	0.00	6	0.02
Fighting, Assault & Horseplay	48	0.13	72	0.20					7	0.02	12	0.03
Other & Unknown Causes	4,035	11.26	4,462	12.45					16	0.04	54	0.15
ENLISTED (all diagnoses combined)												
Enlisted	3,657	11.98	4,055	13.29	184	96.84	186	96.88	18	0.06	69	0.23
<20	182	5.55	219	6.68	14	7.37	14	7.29	3	0.09	5	0.15
20-24	1,184	10.08	1,338	11.40	113	59.47	115	59.90	8	0.07	28	0.24
25-29	876	14.29	963	15.71	29	15.26	29	15.10	6	0.10	21	0.34
30-34	573	13.79	618	14.87	19	10.00	19	9.90	1	0.02	9	0.22
35-39	526	15.68	576	17.17	8	4.21	8	4.17	0	0.00	1	0.03
>=40	316	16.97	341	18.31	1	0.53	1	0.52	0	0.00	5	0.27
E0-E4	1,473	10.16	1,682	11.61	143	75.26	145	75.52	13	0.09	44	0.30
E5-E9	2,184	13.62	2,373	14.80	41	21.58	41	21.35	5	0.03	25	0.16
Infantry, Guncrew, Seamen	334	10.10	367	11.10	39	20.53	40	20.83	1	0.03	8	0.24
Electronic Equipment Repair	461	11.98	508	13.21	29	15.26	29	15.10	1	0.03	6	0.16
Communications & Intelligence	305	10.84	333	11.83	9	4.74	9	4.69	0	0.00	1	0.04
Healthcare	400	15.26	438	16.71	3	1.58	3	1.56	2	0.08	8	0.31
Technical & Other Professional	22	5.13	28	6.52	1	0.53	1	0.52	0	0.00	2	0.47
Functional Support & Admin	395	10.99	446	12.41	11	5.79	11	5.73	1	0.03	5	0.14
Electrical & Mechanical Repair	1,104	12.49	1,229	13.90	57	30.00	57	29.69	11	0.12	27	0.31
Craftwork & Construction	311	18.03	326	18.90	13	6.84	13	6.77	0	0.00	5	0.29
Service, Transport & Supply	204	9.52	227	10.60	10	5.26	10	5.21	1	0.05	3	0.14
Students, Trainees & Unknown Enlist	121	10.08	153	12.74	12	6.32	13	6.77	1	0.08	4	0.33
OFFICER (all diagnoses combined)												
Officer	783	14.70	851	15.98	6	3.16	6	3.13	0	0.00	4	0.08
<20	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20-24	45	8.29	50	9.21	2	1.05	2	1.04	0	0.00	0	0.00
25-29	146	12.64	151	13.08	0	0.00	0	0.00	0	0.00	2	0.17
30-34	134	12.18	147	13.36	1	0.53	1	0.52	0	0.00	1	0.09
35-39	171	16.22	185	17.55	1	0.53	1	0.52	0	0.00	1	0.09
>=40	287	19.48	318	21.59	2	1.05	2	1.04	0	0.00	0	0.00
O0-O3,W0-W3	437	13.67	472	14.77	4	2.11	4	2.08	0	0.00	4	0.13
O4-O10,W4-W5	346	16.25	379	17.80	2	1.05	2	1.04	0	0.00	0	0.00
General/Flag Ofc & Executives	3	6.21	3	6.21	0	0.00	0	0.00	0	0.00	0	0.00
Tactical Operations Off.	325	16.25	347	17.35	0	0.00	0	0.00	0	0.00	0	0.00
Intelligence Off.	31	13.78	35	15.56	0	0.00	0	0.00	0	0.00	0	0.00
Engineering & Maintenance Off.	120	18.02	128	19.22	3	1.58	3	1.56	0	0.00	1	0.15
Healthcare Off.	151	14.81	167	16.37	0	0.00	0	0.00	0	0.00	0	0.00
Scientists & Professional Off.	28	12.35	29	12.79	0	0.00	0	0.00	0	0.00	1	0.44
Administrative Off.	32	10.82	35	11.84	0	0.00	0	0.00	0	0.00	0	0.00
Supply & Logistics Off.	44	16.82	49	18.73	0	0.00	0	0.00	0	0.00	0	0.00
Students, Trainees & Unknown Off.	49	8.43	58	9.98	3	1.58	3	1.56	0	0.00	2	0.34

1. Rates are per 1,000 person-years.

2. Use of ICD-9-CM E-codes for "cause of injury" is largely incomplete for theater healthcare records and therefore omitted.

3. Person-time is not available for deployments so the proportion of the total number of diagnoses is shown.

[Return to Introduction Page](#)

Prepared by Armed Forces Health Surveillance Center (AFHSC)

Source: Defense Medical Surveillance System (DMSS) as of 29-MAR-2011



**TRI-SERVICE
VISION
CONSERVATION
AND READINESS**